

Date: Friday, 02/05/2008 10:45:53 AM
 User: Julie Lecocq

Process Sheet

Customer	: CU-DAR001 Dart Helicopters Services	Drawing Name	: BK117 SKIDTUBE ASSEMBLY
Job Number	: 38986		
Estimate Number	: 12899		
P.O. Number	:	Part Number	: D117762011
This Issue	: 02/05/2008	S.O. No.	:
Prsht Rev.	: NC	Drawing Number	: N/A PRELIM
First Issue	: / /	Project Number	: N/A
Previous Run	: 38985	Drawing Revision	: A PRELIM
	Type : SKIDTUBES	Material	:
Written By	:	Due Date	: 20/05/2008
Checked & Approved By	: <u>JUD 08.5.02</u>	Qty:	1 Um: Each
Comment	: Est Rev:A 07.06.11 New Issue EC Est Rev:B 08-02-22 change to revA DD verified by:		

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	DC	DOCUMENT CONTROL
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JUD 08.6.26 White label only



Paper work is 87C
10/06/27

Comment: DOCUMENT CONTROL

Photocopy bluefile & type labels per PPP D117-762-011 CHG001

50506/26 (X)

2.0	38986A	BK117 SKIDTUBE ASSEMBLY
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Comment: Sub-Component BK117 SKIDTUBE ASSEMBLY

Batch: 38986A

SB

3.0	PACKAGING 1	PACKAGING RESOURCE #1
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Comment: PACKAGING RESOURCE #1

Pick Packing Kit

4.0	D35121	Wearplate
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Comment: Qty.: 2.0000 Each(s)/Unit Total: 2.0000 Each(s)

WEARPLATE

Batch: 39020 *

AS 08/06/09 (X)

5.0	AN960JD10L	Washer
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Comment: Qty.: 8.0000 Each(s)/Unit Total: 8.0000 Each(s)

Washer

Batch: M104885

AS 08/05/12 (X)

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☒ No ☐ DQA: ☒ Date: 08/06/06
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Friday, 02/05/2008 10:45:53 AM
User: Julie Lecocq

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: BK117 SKIDTUBE ASSEMBLY

Job Number: 38986

Part Number: D117762011

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

AN3C4A

BOLT



Comment: Qty.: 8.0000 Each(s)/Unit Total : 8.0000 Each(s)

BOLT

BATCH:

M107737

JS 08/05/12 (XII)

7.0

AN451A

Bolt



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Bolt

BATCH:

M107755

JS 08/05/12 (XI)

8.0

D2972

Bushing



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)

Bushing

BATCH:

14103

JS 08/05/12 (XI)

9.0

MS21042L4

Nut



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Nut

BATCH:

M106051

JS 08/05/12 (XI)

10.0

QC4

INSPECT 100% KITS FOR COMPLETENESS



Comment: INSPECT 100% KITS FOR COMPLETENESS

JS 08/06/12 (X)

11.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and pack for shipping as per PPP D117-762-011

Location:

PPP Rev:

Draft

Bill said No Red Label
JS 08/06/12 (X)

12.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

JS 08/06/12 (X)

Job Completion



B 38986A

mf
08-06-26

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Friday, 02/05/2008 10:46:18 AM
 User: Julie Lecocq

Process Sheet

Customer :	CU-DAR001 Dart Helicopters Services	Drawing Name :	BK117 SKIDTUBE ASSEMBLY
Job Number :	38986A		
Estimate Number :	12898		
P.O. Number :		Part Number :	D117762041
This Issue :	02/05/2008	S.O. No. :	
Prsht Rev. :	NC	Drawing Number :	D3582 REVA PRELIM
First Issue :	//	Project Number :	N/A
Previous Run :	38985A	Drawing Revision :	A PRELIM
		Material :	
Written By :		Due Date :	20/05/2008
Checked & Approved By :	JLD 08.5.02	Qty:	1 Um: Each
Comment :	Est Rev:A 07.06.11 New Issue EC Prototype for engineering use only (LG0005-32910) Est Rev:B 08-02-22 change to revA as per dwg DD verified by:		

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0

DC

DOCUMENT CONTROL



Comment: DOCUMENT CONTROL

Photocopy bluefile & type labels per PPP D117-762-041 CHG001

2.0

D2962150

3.540 Outer Tube, Extrud



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Pick:

Qty Part Number Description Batch

1 D2962-150

Extrusion

B 27774 ① H 8-5-7

3.0

SKIDTUBES 1

SKIDTUBESS RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Determine square end of tube and deburr

2-Drill #30 pilot holes using DT8678. Do not open holes.

3- Deburr holes.

H 8-5-7

4.0

BENDING

BENDING MACHINE - SKIDTUBES



Comment: BENDING MACHINE

Bend tube as per program on CNC Bender and Dwg D3582. Use 5/16" locator pin on buggy "A".

E 8-5-9

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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NOTE: Date & initial all entries

Date: Friday, 02/05/2008 10:46:18 AM

User: Julie Lecocq

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: BK117 SKIDTUBE ASSEMBLY

Job Number: 38986A

Part Number: D117762041

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

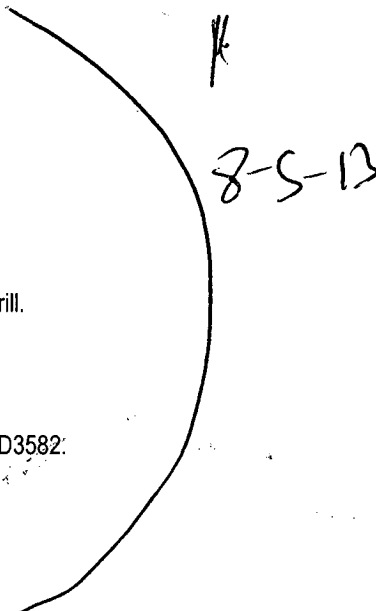
SKIDTUBES 1

SKIDTUBESS RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

- 1-Cut Fwd end of the tube using DT8185 *EL 8-5-9*
- 2-Cut Aft end at VC using DT8185
- 3-Deburr ends
- 4-Drill Aft Cap holes using DT8678 ***DO NOT OPEN AFT CAP HOLE***
- 5-Locate DT 8973 & Drill Ground wire hole on top of Tube.
- 6-Install 3/16 cleco in Ground wire hole ,then drill all X-Bolt holes using 3/16" drill.
- 7-Drill pilot holes for wearplates using DT8974
- 8-Open wearplate holes and ground wire holes to Ø19/64" (0.297") as per Dwg D3582:
- 9-Open Aft Cap holes using .209" drill.
- 10-Deburr holes.



6.0

D2964

Cap



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Cap

Batch:

B14101 BE 08/05/13

7.0

SKIDTUBES 1

SKIDTUBESS RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Weld fwd cap D2964 per dwg D3582 and OSI 004

A/R AL ROD

Batch:

m107877/m107263 BE 08/05/13

2-Grind flush

8-5-14

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: BK117 SKIDTUBE ASSEMBLY

Job Number: 38986A

Part Number: D117762041

Job Number:



Seq. #:

Machine Or Operation:

Description :

8.0

QC10

VISUAL INSPECTION OF GROUND WELDS



Comment: VISUAL INSPECTION OF GROUND WELDS

08/05/14 (1)

9.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

08/05/14 (1)

10.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

8-5-14 (1)

11.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

08-05/14

12.0

D2971

Cross Bolt Spacer



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Cross Bolt Spacer

batch B 39011

BE 08/05/20

13.0

D2973

Cross Bolt Spacer



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Cross Bolt Spacer

Batch: B 14636

BE 08/05/20

14.0

D36621

Crossbolt Spacer



Comment: Qty.: 3.0000 Each(s)/Unit Total : 3.0000 Each(s)

SPACER

batch B 39022

BE 08/05/20

15.0

D36623

Crossbolt Spacer



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

SPACER

batch B 3719.0

BE 08/05/20

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Friday, 02/05/2008 10:46:18 AM
User: Julie Lecocq

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: BK117 SKIDTUBE ASSEMBLY

Job Number: 38986A

Part Number: D117762041

Job Number:



Seq. #:

Machine Or Operation:

Description :

16.0

D35841

Web



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)
WEB B39021 ① K 8-5-14

17.0

SKIDTUBES 1

SKIDTUBESS RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Open X-Bolt holes to .750"(4Places) as per Dwg D3582, section B-B

2-Counter Sink X-BOLT holes as per Dwg D3582

3-Deburr and blow out chips from inside of tube.

4-Bond web as per Dwg D3582 & QSI 015

A/R 241 Sike Flex Batch: M107804

Exp Date: 8-7-10

5-Weld x-bolt spacers(D2973) as per Dwg D3582 section B-B.

A/R AL ROD Batch: M107877

6-Grind welds flush

K
8-5-14

M 107877 BE 08-05-20
- AWM 8-5-20

Tools: E

18.0

QC10

VISUAL INSPECTION OF GROUND WELDS



Comment: VISUAL INSPECTION OF GROUND WELDS

19.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

20.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING

Powder Coat White Gloss (Ref: 4.3.5.1) as per QSI 005 4.3

START TIME:

OVEN TEMPERATURE:

FINISH TIME:

11:00 am
320 OF
11:30 am

08/05/21 (4)
08/05/21 (H)
PRESSURE WASH BR 08-05-21
M.H 08/05/21 (1X)

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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Date: Friday, 02/05/2008 10:46:18 AM
User: Julie Lecocq

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: BK117 SKIDTUBE ASSEMBLY

Job Number: 38986A

Part Number: D117762041

Job Number:



Seq. #:

Machine Or Operation:

Description :

21.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



YJ



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

08-05-26

(X1)

22.0

ALS41032130

Insert



Comment: Qty.: 36.0000 Each(s)/Unit Total: 36.0000 Each(s)

Insert

Batch: M105819

YJ

23.0

ALS4428165

Inserts



Comment: Qty.: 2.0000 Each(s)/Unit Total: 2.0000 Each(s)

Inserts

batch 116989

***same as ALS7-428-165 QSI 0017 ***

YJ

24.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Install Wearplate & Ground Wire inserts as per Dwg D3582.

YJ

08-05-26

(X1)

25.0

D2965

Cap, 105 Skidtube



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Cap

Batch: 1339389

YJ

26.0

D35083

Wearplate



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

WEARPLATE

Batch: 1338431

YJ

27.0

D35089

Wearplate



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

WEARPLATE

Batch: 1335089

YJ

08-05-26

(X1)

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
















QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Friday, 02/05/2008 10:46:18 AM
User: Julie Lecocq

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services		Drawing Name: BK117 SKIDTUBE ASSEMBLY	
Job Number: 38986A		Part Number: D117762041	
Job Number:			
Seq. #:	Machine Or Operation:	Description :	
28.0	D350811	Wearplate	
			
Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s) Batch: <u>1336415</u> WEARPLATE <i>HL</i>			
29.0	D350813	Wearplate	
			
Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s) WEARPLATE * Batch: <u>1338528</u> <i>HL</i>			
30.0	D35583	Gasket	
			
Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s) GASKET Batch: <u>1338613</u> <i>HL</i>			
31.0	D35589	Gasket	
			
Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s) GASKET Batch: <u>1336420</u> <i>HL</i>			
32.0	D355811	Gasket	
			
Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s) GASKET Batch: <u>1336419</u> <i>HL</i>			
33.0	D355813	Gasket	
			
Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s) GASKET Batch: <u>1336418</u> <i>HL</i>			
34.0	AN3C4A	BOLT	
			
Comment: Qty.: 28.0000 Each(s)/Unit Total : 28.0000 Each(s) BOLT Batch: <u>M103737</u> <i>HL</i> 08.05.26 <i>(U)</i>			

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Friday, 02/05/2008 10:46:18 AM
User: Julie Lecocq

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: BK117 SKIDTUBE ASSEMBLY

Job Number: 38986A

Part Number: D117762041

Job Number:



Seq. #:

Machine Or Operation:

Description :

35.0

AN3C5A

Bolt



Comment: Qty.: 2.0000 Each(s)/Unit Total: 2.0000 Each(s)

Bolt

Batch: M1107737

92

36.0

AN44A

Bolt



Comment: Qty.: 2.0000 Each(s)/Unit Total: 2.0000 Each(s)

Bolt

batch M1106918

92

37.0

AN960C10L

washer



Comment: Qty.: 28.0000 Each(s)/Unit Total: 28.0000 Each(s)

washer

Batch: M1107971

92

38.0

AN960JD10L

Washer



Comment: Qty.: 2.0000 Each(s)/Unit Total: 2.0000 Each(s)

Washer

batch M1104885

92

39.0

AN960JD416L

Washer



Comment: Qty.: 2.0000 Each(s)/Unit Total: 2.0000 Each(s)

Washer

batch M1107008

92

40.0

D3492049

Plug Assembly



Comment: Qty.: 2.0000 Each(s)/Unit Total: 2.0000 Each(s)

PLUG ASSEMBLY

batch 1337288

92

41.0

D3492051

Plug Assembly



Comment: Qty.: 2.0000 Each(s)/Unit Total: 2.0000 Each(s)

PLUG ASSEMBLY

batch 1337289

92

08.05.26

92

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☐ No ☒ DQA: ☒ Date: 8/16/20

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Friday, 02/05/2008 10:46:19 AM
User: Julie Lecocq

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: BK117 SKIDTUBE ASSEMBLY

Job Number: 38986A

Part Number: D117762041

Job Number:



Seq. #:

Machine Or Operation:

Description :

42.0

D3492053

Plug Assembly



Comment: Qty.: 6.0000 Each(s)/Unit Total: 6.0000 Each(s)

PLUG ASSEMBLY

batch 1339017

JH

43.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

1-Inspect for Foreign objects

2-Install Aft cap as per Dwg D3582, Detail "C"

A/R 241 Sika Flex Batch: M1107804

Exp Date: 08/10

3-Install Wearplates as per Dwg D3582,

Note: Install Bolt and washer on Ground Wire inserts on top of tube see section D-D of dwg D3582

*****Do not install bolts where indicated on Dwg(Note #6)*****

A/R 241 Sika Flex Batch: M1107804

Exp Date: 08/10

4- Wing Walk as per Dwg D3582 and QSI 005 4.4

M1107892 4808-05-26 x1

44.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

08/05/27 x1

45.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and pack for shipping as per PPP D117-762-041

Location:

PPP Rev:

Bill said no Red label.

Draft PPP 38986

08/06/26 x1

46.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

08/06/26

Job Completion



MF 08-06-26

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

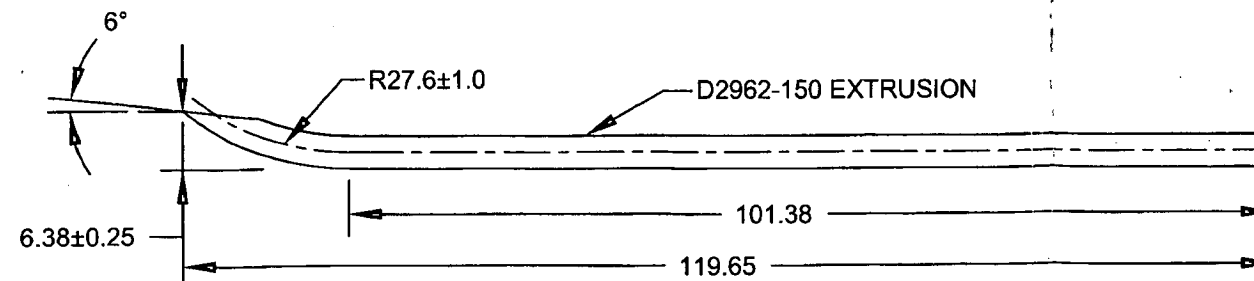
NOTE: Date & initial all entries

PARTS LIST FOR D3582-041 SKIDTUBE ASSEMBLY

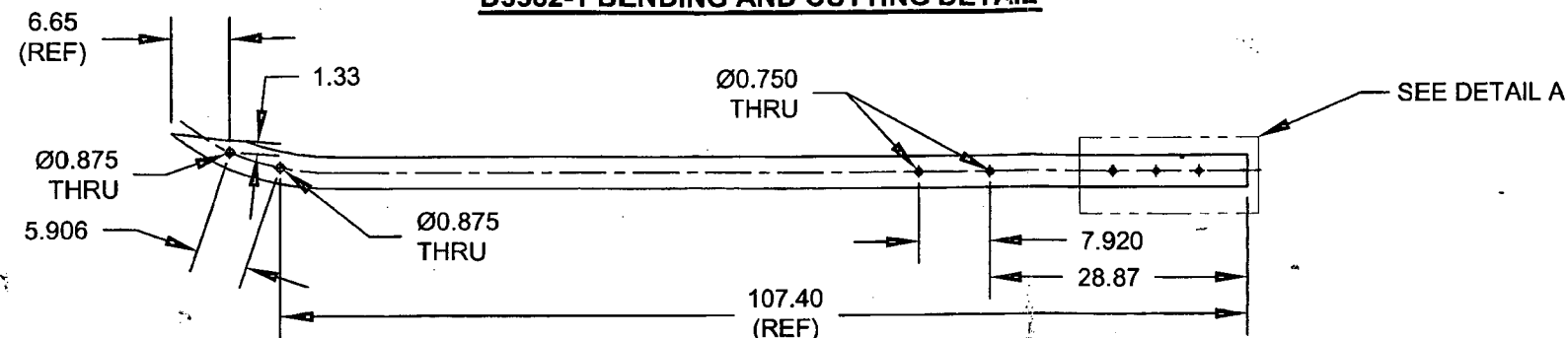
Qty	Part Number	Description
X	D3582-041	SKIDTUBE ASSEMBLY
1	D2962-150	EXTRUSION
1	D2964	CAP
1	D2965	CAP
1	D2971	CROSS BOLT SPACER
2	D2973	CROSS BOLT SPACER
2	D3492-049	PLUG ASSEMBLY
2	D3492-051	PLUG ASSEMBLY
6	D3492-053	PLUG ASSEMBLY
1	D3508-3	WEARPLATE
1	D3508-9	WEARPLATE
1	D3508-11	WEARPLATE
1	D3508-13	WEARPLATE
1	D3558-3	GASKET
1	D3558-9	GASKET
1	D3558-11	GASKET
1	D3558-13	GASKET
1	D3584-1	WEB
3	D3662-1	CROSS BOLT SPACER
1	D3662-3	CROSS BOLT SPACER
36	AELS-1032-130	INSERT
2	ALS7-428-165	INSERT
28	AN3C4A	BOLT
2	AN3-5A	BOLT
2	AN4-4A	BOLT
28	AN960C10L	WASHER
2	AN960JD10L	WASHER
2	AN960JD416L	WASHER

GENERAL NOTES:

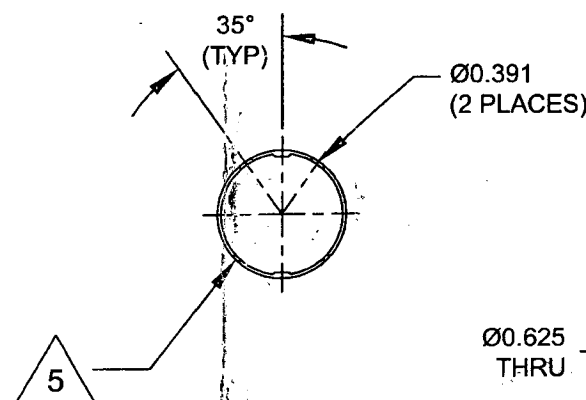
- ALL DIMENSIONS ARE IN INCHES
- TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- WELDING TO BE DONE PER DART QSI 004.
- INSERT D3584-1 WEB TO LOCATION SHOWN OFF AFT END OF SKIDTUBE AND BOND WEB INTO OUTER TUBE WITH NON-STRUCTURAL SIKAFLEX-241/-291 ADHESIVE PER DART QSI 015 AFTER BENDING.
- USE DART DRILL TEMPLATE DT8900 TO LOCATE AND DRILL $\varnothing 0.297$ HOLES (36 PLACES) FOR WEARSHOE INSERTS. INSTALL AELS-1032-130 PER SECTION G-G (36 PLACES) AFTER FINISH. SEAL WEARPLATE BOLTS WITH SIKAFLEX-241/-291.
- DO NOT INSTALL AN3C4A BOLTS AND AN960C10L WASHERS IN INDICATED LOCATIONS.
- FINISH:
 - CHEMICAL CONVERSION COAT PER DART QSI 005 4.1 PRIOR TO INSERTING D3584-1 WEB.
 - POWDER COAT ASSEMBLY GLOSS WHITE (REF 4.3.5.1) PER DART QSI 005 4.3.
 - ANTI-SKID PAINT AS INDICATED TO 1.00 ABOVE CENTER LINE PER DART QSI 005 4.4



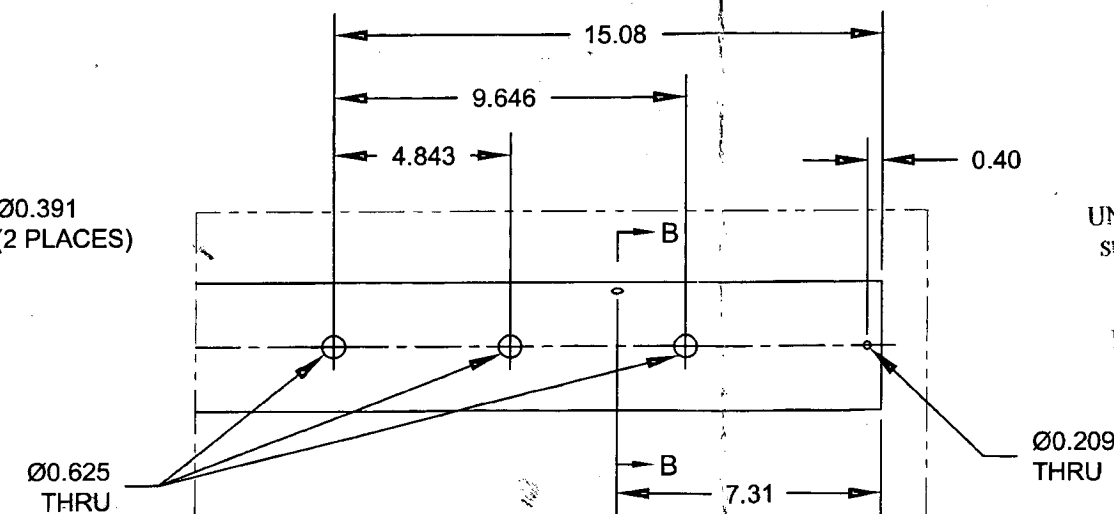
D3582-1 BENDING AND CUTTING DETAIL



D3582-1 DRILLING DETAIL



SECTION B-B
SCALE 1:5



DETAIL A
SCALE 1:5

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REV.	DESCRIPTION	BY	DATE
DESIGN	21		
DRAWN	PH		
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MFG. APPR.			
APPROVED			
DE APPR.			
DATE	07.06.08		

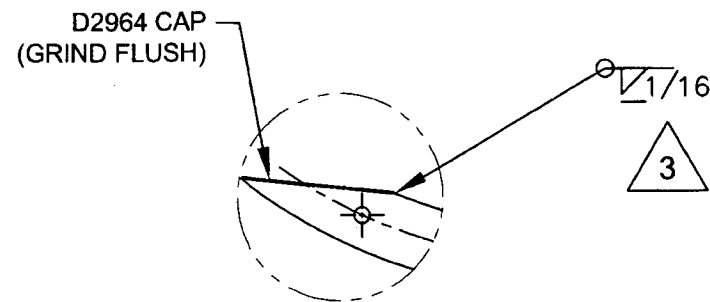
DART AEROSPACE USA, INC
PORT HADLOCK, WA

DRAWING NO. D3582
REV. A
SHEET 1 OF 2

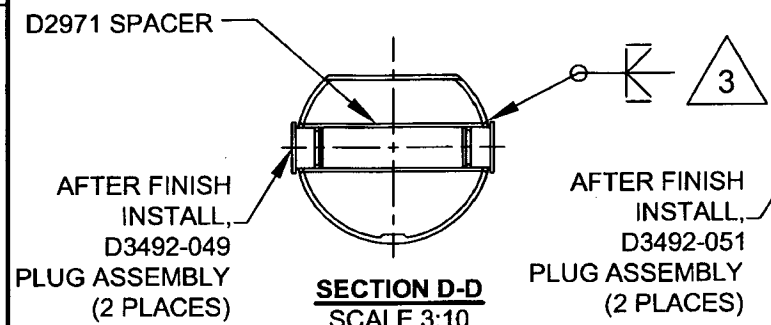
TITLE BK 117 SKIDTUBE ASSEMBLY
SCALE 1:20

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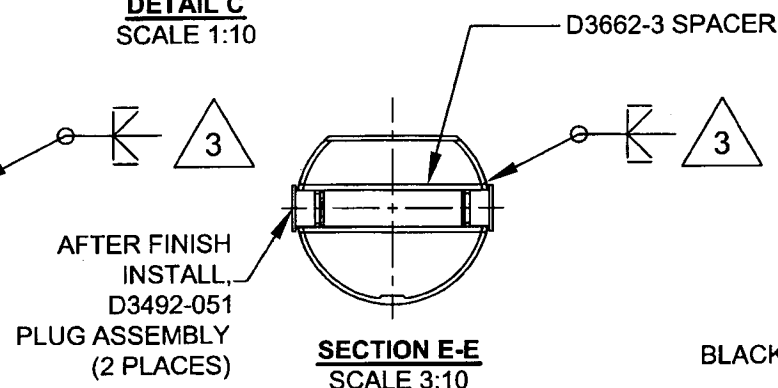
DETAIL C
SCALE 1:10



SECTION D-D NOTES

AFTER BENDING AND DRILLING ASSEMBLY PERFORM THE FOLLOWING:

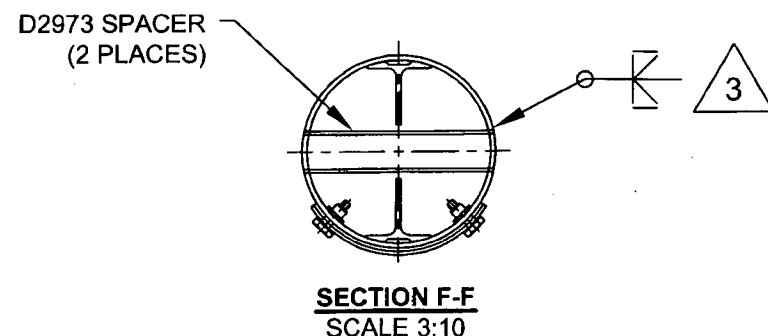
1. CHAMFER HOLE 0.030 x 45°
2. INSERT D2971 SPACER
3. WELD INTO PLACE AND GRIND FLUSH
4. PASS Ø0.750 DRILL TO REMOVE SPILL OVER
5. AFTER FINISH, INSTALL D3492-049 PLUG ASSEMBLY (2 PLACES)



SECTION E-E NOTES

AFTER BENDING AND DRILLING ASSEMBLY PERFORM THE FOLLOWING:

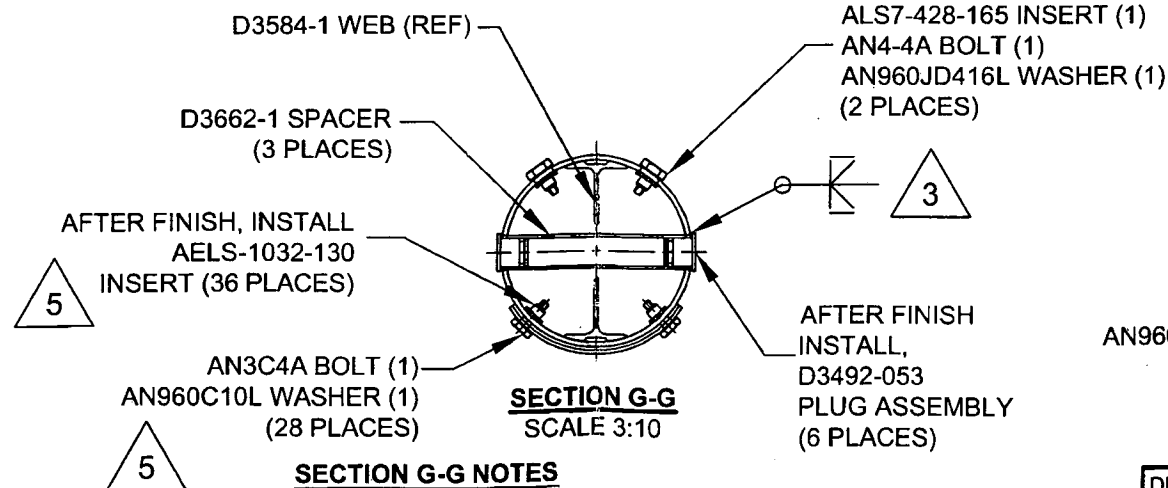
1. CHAMFER HOLE 0.030 x 45°
2. INSERT D3662-3 SPACER
3. WELD INTO PLACE AND GRIND FLUSH
4. PASS Ø0.672 DRILL TO REMOVE SPILL OVER
5. AFTER FINISH, INSTALL D3492-051 PLUG ASSEMBLY (2 PLACES)



SECTION F-F NOTES

AFTER BENDING AND DRILLING ASSEMBLY PERFORM THE FOLLOWING:

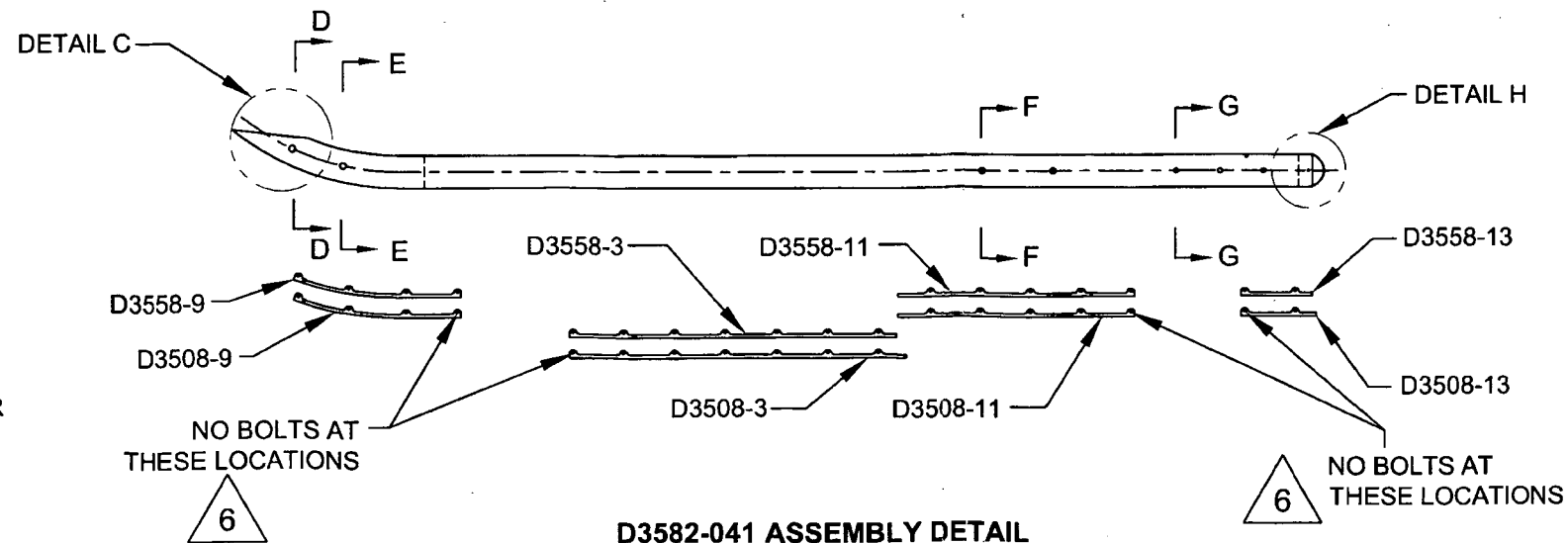
1. CHAMFER HOLE 0.030 x 45°
2. INSERT D2973 SPACER (2 PLACES)
3. WELD INTO PLACE AND GRIND FLUSH
4. PASS Ø0.625 DRILL TO REMOVE SPILL OVER



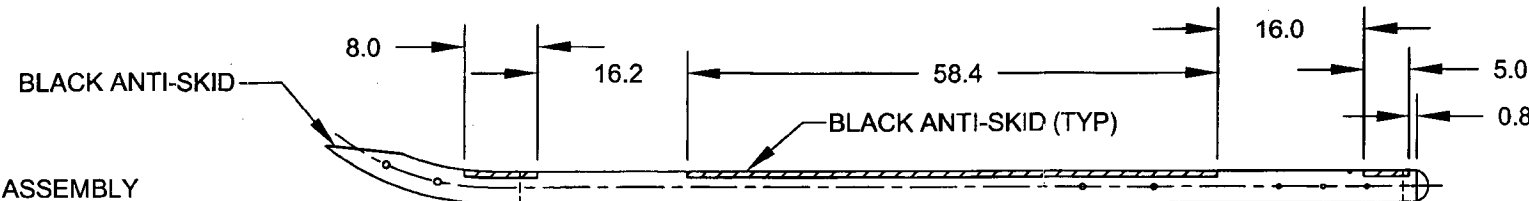
SECTION G-G NOTES

AFTER BENDING AND DRILLING ASSEMBLY PERFORM THE FOLLOWING:

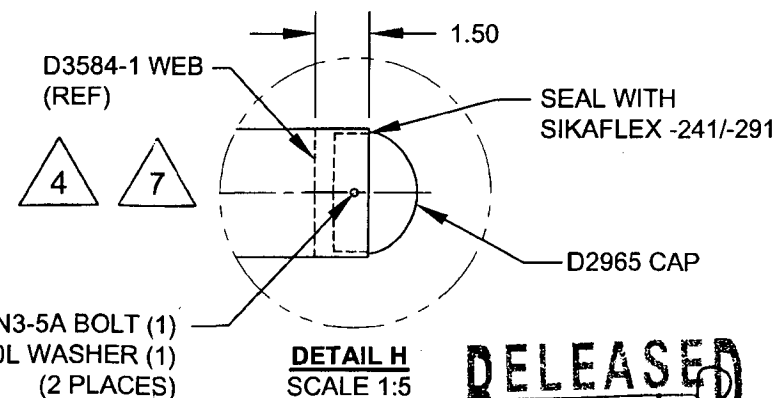
1. CHAMFER HOLE 0.030 x 45°
2. INSERT D3662-1 SPACER (3 PLACES)
3. WELD INTO PLACE AND GRIND FLUSH
4. PASS Ø0.515 DRILL TO REMOVE SPILL OVER
5. AFTER FINISH, INSTALL D3492-053 PLUG ASSEMBLY (6 PLACES)



D3582-041 ASSEMBLY DETAIL



D3582-041 BLACK ANTI-SKID DETAIL



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MFG. APPR.		D3582	SHEET 2 OF 2
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DE APPR.		BK 117 SKIDTUBE ASSEMBLY	1:20
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**AWS D17.1.2001
QUALIFICATION TEST RECORD**

Name: Barchy Elliot
Job number: 38382A
Part number: D117 762 041
Description: Skid tube Bk117
Welding Process: Tig[☒] Mig[]
Base material: Aluminium
Current: AC[☒] DC[]

TEST REQUIREMENTS AND RESULTS

Visual: pass[☒] fail[]
Penetration: pass[☒] fail[]

UNACCEPTABLE

Cracks: pass[☒] fail[]
Undercut: pass[☒] fail[]
Pin holes: pass[☒] fail[]
Overlap (cold lap): pass[☒] fail[]
Porosity (surface): pass[☒] fail[]
Coloration: pass[☒] fail[]

Qualifier Pd. Duval Date of Test Coupon 08-04-14

Welder Barchy Elliot Date of Test Coupon 08-04-14

The above named individual is qualified in accordance with AWS D17.1.2001 to weld

